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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,817	02/24/2004	Yong Cheol Park	46500-000120/US	1150

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EXAMINER

ALUNKAL, THOMAS D

ART UNIT	PAPER NUMBER
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2627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/784,817	Applicant(s) PARK ET AL.	
	Examiner THOMAS D. ALUNKAL	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/2/08 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 25-47 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 37, 39, and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 37, 39, and 41, these claims recite "in the management area." However, it is unclear which management area "the management area" corresponds to since each the claims base claims include both first and second management areas.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (hereafter Hwang)(US PgPub 2003/0076096) and in view of Gotoh et al. (Gotoh) (US PgPub 2001/0043800).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding claim 25, Hwang discloses a computer readable medium having a data structure for managing a data area of the computer readable medium (see Title and Abstract), comprising: a first management area storing a data block, the first management area being a temporary defect management area (Figure 3A, TDMA), the data block having information (Figure 4A, TDDS) which includes pointers for pointing to addresses of various addresses in the TDMA (Paragraph 0062), the data block including a plurality of sectors (Figure 4A), and the second information being recorded in a last sector of the data block (Figure 4A, where TDDS is recorded in the final sector of the TDMA); and a second management area storing a latest data block recorded in the first management area when no further recording can be made on the computer

medium, the second management area being a defect management area (Figure 3A, DMA and Paragraph 0036). Hwang does not specifically disclose a first information including recordation status indicating recorded areas and non-recorded areas of the data area. In the same field of endeavor, Gotoh discloses a recording medium with a defect management structure (Figure 1) which includes a space bit map (Figure 1, Element 141). The space bit map includes recordation status information which indicates both recorded and non-recorded areas of the volume space (Paragraphs 0160 and 0172).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the space bit map for monitoring the recordation status of the volume space of Gotoh to the defect management data structure of Hwang, motivation being to efficiently monitor the recordation status of the user data area, which prevents unwanted recording errors when attempting to record to previously recorded areas of the disc.

Regarding claims 26, Gotoh discloses wherein the first information indicates recordation status of the data area on a recording unit by recording unit basis (Paragraph 0172).

Regarding claim 27, Hwang discloses wherein the data block includes at least one recording unit (Figure 4A).

Regarding claim 28, Hwang discloses wherein the second information includes a second pointer pointing to an address where a defect list is recorded (Paragraph 0062).

Regarding claim 29, Hwang discloses wherein the address is a first physical sector number of a location where the first information is recorded (Paragraph 0068).

Regarding claim 30, Hwang discloses where the first and second pointers identify most current versions of the first information and the defect list, respectively, as of when the second information is recorded (Paragraph 0049).

Regarding claim 31, Hwang discloses a method of recording management data on a recording medium (see Title and Abstract), comprising: recording a data block in a first management area, the first management area being a temporary defect management area (Figure 3A, TDMA), the data block having information (Figure 4A, TDDS) which includes pointers for pointing to addresses of various addresses in the TDMA (Paragraph 0062), the data block including a plurality of sectors (Figure 4A), and the second information being recorded in a last sector of the data block (Figure 4A, where TDDS is recorded in the final sector of the TDMA); and recording a latest data block recorded in the first management area in a second management area when no further recording can be made on the recording medium, the second management area being a defect management area (Figure 3A, DMA and Paragraph 0036). Hwang does not specifically disclose a first information including recordation status indicating recorded areas and non-recorded areas of the data area. In the same field of endeavor, Gotoh discloses a recording medium with a defect management structure (Figure 1) which includes a space bit map (Figure 1, Element 141). The space bit map includes recordation status information which indicates both recorded and non-recorded areas of the volume space (Paragraphs 0160 and 0172).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the space bit map for monitoring the recordation status of the volume space of Gotoh to the defect management method of Hwang, motivation being to efficiently monitor the recordation status of the user data area, which prevents unwanted recording errors when attempting to record to previously recorded areas of the disc.

Regarding claim 32, Hwang discloses wherein the second information includes a second pointer pointing to an address where a defect list is recorded (Paragraph 0062).

Regarding claim 33, Hwang discloses where the first and second pointers identify most current versions of the first information and the defect list, respectively, as of when the second information is recorded (Paragraph 0049).

Regarding claim 34, Hwang discloses a method of reproducing data from recording medium (Paragraph 0015), comprising: reproducing at least a portion of data recorded on the recording medium based on a data block recorded in a first management area of the recording medium when further recording can be made on the recording medium, the first management area being a temporary defect management area (Figure 3A, TDMA and Paragraph 0037), the data block having information (Figure 4A, TDDS) which includes pointers for pointing to addresses of various addresses in the TDMA (Paragraph 0062), the data block including a plurality of sectors (Figure 4A), and the second information being recorded in a last sector of the data block (Figure 4A, where TDDS is recorded in the final sector of the TDMA); reproducing at least a portion of data recorded on the recording medium based on a data block recorded in a second

management area of the recording medium when no further recording can be made on the recording medium, the second management area being a defect management area ((Figure 3A, DMA and Paragraph 0036), wherein the data block in the second management area is based on the latest data block recorded in the first management area (Paragraph 0049). Hwang does not specifically disclose a first information including recordation status indicating recorded areas and non-recorded areas of the data area. In the same field of endeavor, Gotoh discloses a recording medium with a defect management structure (Figure 1) which includes a space bit map (Figure 1, Element 141). The space bit map includes recordation status information which indicates both recorded and non-recorded areas of the volume space (Paragraphs 0160 and 0172).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the space bit map for monitoring the recordation status of the volume space of Gotoh to the defect management method of Hwang, motivation being to efficiently monitor the recordation status of the user data area, which prevents unwanted recording errors when attempting to record to previously recorded areas of the disc.

Regarding claim 35, Hwang discloses wherein the second information includes a second pointer pointing to an address where a defect list is recorded (Paragraph 0062).

Regarding claim 36, Hwang discloses where the first and second pointers identify most current versions of the first information and the defect list, respectively, as of when the second information is recorded (Paragraph 0049).

Regarding claim 37, Hwang discloses wherein the management area includes space to record a subsequent data block having the first information different from the first information in the data block (Figures 4A-4B).

Regarding claim 38, Gotoh discloses wherein the first information in the subsequent data block reflects changes in the recordation status since the data block was recorded (Paragraph 0172).

Regarding claim 39, Gotoh discloses recording a subsequent data block in the management area, the subsequent data block having first information different from the first information in the data block (Paragraph 0172).

Regarding claim 40, Gotoh discloses wherein the first information in the subsequent data block reflects changes in the recordation status since the data block was recorded (Paragraph 0172).

Regarding claim 41, Hwang discloses wherein the management area includes more than one of the data blocks and the reproducing step reproduces based on a most recently recorded one of the data blocks (Paragraph 0036).

Regarding claim 42, Hwang discloses wherein the most recently recorded one of the data blocks includes a most current version of the first and second information (Paragraph 0049).

Regarding claims 43-45, Hwang discloses wherein only the last sector includes the second information (Figure 4A, where TDDS is recorded in the final sector of the TDMA).

Apparatus claims 46 and 47 are drawn to the apparatus corresponding to the method of using same as claimed in claims 31 and 33. Therefore apparatus claims 46 and 47 correspond to method claims 31 and 33, and are rejected for the same reasons of obviousness as used above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gotoh et al. (US 6,581,167) disclose an information recording medium, information recording method, and information recording/reproduction system. Takahashi (US 5,914,928) discloses an information recording disk having a replacement area. Ueda et al (US PgPub 2001/0026511) disclose an information recording medium. Ito et al. (US 6,160,778) discloses an information recording medium.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS D. ALUNKAL whose telephone number is (571)270-1127. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas D Alunkal/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627